## **REMARKS**

The Examiner rejected claims 1-14 under 35 U.S.C. § 102(e) as being anticipated by Evans. To anticipate a claim, all the limitations of the claim must be found either expressly or inherently in the four corners of the reference. The Evans reference is missing numerous limitations of the claims.

The claims of the above entitled patent application recite a first optical gain element that generates a first light beam having a first optical frequency and a second optical gain element that generates a second light beam having a second optical frequency. Evans does not disclose a semiconductor laser with two different optical gain elements that generate light beams having different frequencies. Additionally, Evans does not disclose the frequency mixer to mix the two different frequencies to produce a polarization wave at a third optical frequency. Finally, Evans does not disclose a grating that couples power from the polarization wave to an electromagnetic wave propagating at the third frequency as recited in the claims. Evans does not disclose any of these claim limitations.

The phase grating 8 of Evans is merely defining an output angle of the light (See Col. 5, lines 42-45; Col. 6, lines 1 through Col. 7, line 9). Evans does not disclose nor suggest to mix two different light beams having different frequencies to create a polarization wave at a third frequency and then a grating that couples power from this polarization wave to an electromagnetic wave at the third frequency. Consequently, Evans does not anticipate the claims of the above entitled application.

The Examiner rejected claims 1, 3, 6, 8, 11 and 13 under 35 U.S. C. § 102(b) as being anticipated by Uchida. Uchida does not disclose creating light beams of different frequencies, mixing the beams to create a polarization wave of a third frequency and then coupling the power of the polarization wave to an electromagnetic wave with a grating as recited by the claims of the above entitled application. The examiner points to fig. 16 in an apparent attempt to support a position that Uchida discloses a generation of light beams with different optical frequencies. Neither fig. 16 nor the accompanying text discloses or suggests creating light beams with different frequencies. Additionally, Uchida does not disclose mixing beams of different frequencies to create a polarization wave of a third frequency, or coupling the power

from the polarization wave to an electromagnetic wave with a grating. For these reasons, the Applicant submits that Uchida does not anticipate claims 1, 3, 6, 8, 11, and 13.

In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration of the rejections is requested. Allowance of claims 1-14 at an early date is solicited.

Respectfully submitted,

**IRELL & MANELLA LLP** 

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Ben J. Yorks' Reg. No. 33,609

840 Newport Center Drive Suite 400 Newport Beach, CA 92660-6324 (949) 760-0991 **Certificate of Mailing** 

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on August 3, 2005.